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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,210	03/25/2004	Paul E. Freude	ITFT-PEV104US	6561
23122	7590	11/30/2005	EXAMINER	
RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			COOLEY, CHARLES E	
			ART UNIT	PAPER NUMBER
			1723	
DATE MAILED: 11/30/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/809,210

Applicant(s)

FREUDE ET AL.

Examiner

Charles E. Cooley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 49 is/are allowed.
- 6) ☒ Claim(s) 1-4,9,10,15,19-21,26-29,36,38,40 and 41 is/are rejected.
- 7) ☒ Claim(s) 5-8,11-14,16-18,22-25,30-35,37,39 and 42-48 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>06182004</u> . | 6) <input type="checkbox"/> Other: _____ |

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NON-FINAL OFFICE ACTION

1. This application has been assigned to Technology Center 1700, Art Unit 1723 and the following will apply for this application:

Please direct all written correspondence with the correct application serial number for this application to Art Unit 1723.

Telephone inquiries regarding this application should be directed to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197 or to the Examiner at (571) 272-1139. All official facsimiles should be transmitted to the centralized fax receiving number 571-273-8300.

Information Disclosure Statement

2. Note the attached PTO-1449 form submitted with the Information Disclosure Statement filed 18 JUN 2004.

Drawings

3. The drawings filed 28 APR 2004 are objected to because of the following informalities:

- a. the sheets are not labeled as "Replacement Sheets" in the top margin (37 CFR 1.121(d))
- b. the sheets contain extraneous photocopying marks and are denoted as defective images in the IFW file.

Correction is required.

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4. Applicant should verify that (1) all reference characters in the drawings are described in the detailed description portion of the specification and (2) all reference characters mentioned in the specification are included in the appropriate drawing Figure(s) as required by 37 CFR 1.84(p)(5).

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. **Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" (37 CFR 1.121(d)) and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended.** The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for

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reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

Specification

5. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

6. The use of the trademarks "Lightnin" (see page 4) have been noted in this application. They should be capitalized wherever it appears and be accompanied by the generic terminology. The specification requires correction.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

7. The abstract is acceptable.

8. The title is acceptable.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. **Claims 1-4, 9-10, 15, 19, 20-21, 26-29, 36, 38, 40, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Rains (US 5,378,062).**

The patent to Rains (US 5,378,062) discloses a method and a system as seen in the Figures below comprising a tank 34; a bottom mount mixer 30 in the tank; a mixer magnetic coupling 40 with a shaft (below 42); docking station 12 with a mixer drive 16, 28, 18 with a magnetic coupling 22; the docking station having a cantilevered linkage 74; tank receiving member 38; tank engagement facilitating component 44 or latch portions 24, 44 which mate with each other as seen in Fig. 2; support frame 50; the docking station having a bottom plate 54 with wheels 56; components 48, 76, 78, 80 for maintaining engagement between the tank and the docking station.

More specifically with regard to the method and apparatus, the patent to Rains (US 5,378,062) discloses a transporter which allows a single motor/magnetic coupler assembly to be coupled to one of a plurality of agitator tanks. The transporter includes an arm which is pivotally connected to a frame. The arm supports a motor and an outer magnetic mixer assembly that can be coupled to an inner magnetic mixer assembly located within the inner cavity of an agitator tank. The arm is adapted so that an operator can move the outer magnetic mixer assembly between a first position and a second position. The outer assembly is coupled to the inner assembly when in the second position and decoupled from the inner assembly when in the first position. The transporter has wheels so that the operator can move the outer assembly and motor from one agitator tank to another agitator tank.

In operation, the transporter is moved adjacent to an agitator tank and the outer mixer assembly is rotated into operative engagement with the inner mixer assembly. The motor is then activated to induce rotation of the impeller within the tank. After a

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predetermined time interval, the motor is stopped and the outer mixer assembly is rotated away from the inner assembly. The transporter is then moved to a different agitator tank and the outer mixer assembly is coupled to the inner mixer assembly of the tank. Therefore it is an object of the invention to provide a system that allows one motor/magnetic coupler assembly to operate a plurality of agitator tanks.

FIG. 1 shows a transporter system 10 of the present invention. The transporter system 10 includes a transporter 12 which supports a motor/magnetic mixer assembly 14. The motor mixer assembly 14 includes a motor 16 and an outer magnetic mixer assembly 18. The motor 16 has an output shaft 20 which is connected to a drive magnet 22 that extends from an outer mixer frame 24. The outer mixer frame 24 is captured by a collar 26 which extends from the motor 16. The output shaft 20 shown is typically coupled to another output shaft (not shown) that extends from the motor and is perpendicular to the shaft 20. The shaft 20 and the output shaft of the motor 16 are coupled by a gear box 28 which translates rotation of the motor shaft into rotation of the output shaft 20. Rotation of the Output shaft 20 rotates the drive magnet 22 accordingly. The outer magnetic mixer assembly 18 is adapted to be coupled to an inner magnetic mixer assembly 30 located within an inner cavity 32 of an agitator tank 34. The inner mixer assembly 30 has an impeller 36 that can rotate relative to an inner mixer frame 38. The inner mixer assembly 30 also contains a driven magnet 40 which rotates the impeller 36. Extending from the top of the impeller 36 is a handle 42 which allows the operator to place the inner assembly 30 into the tank 34. The inner mixer frame 38 has an annular sleeve receptacle 44 that extends through an opening 40 in the tank 34. The

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sleeve 44 is adapted to receive the drive magnet 22 of the outer magnetic mixer assembly 18 and align the drive magnet 22 with the driven magnet 40. The motor/magnetic mixer assembly 14 is supported by an arm 48 that is pivotally connected to a frame 50. The frame 50 has a support beam 52 that is mounted to a baseplate 54. Attached to the baseplate 54 are a plurality of wheels 56. The frame 50 may also have a handle 58 which allows an operator to move the transporter 12 from one location to another location.

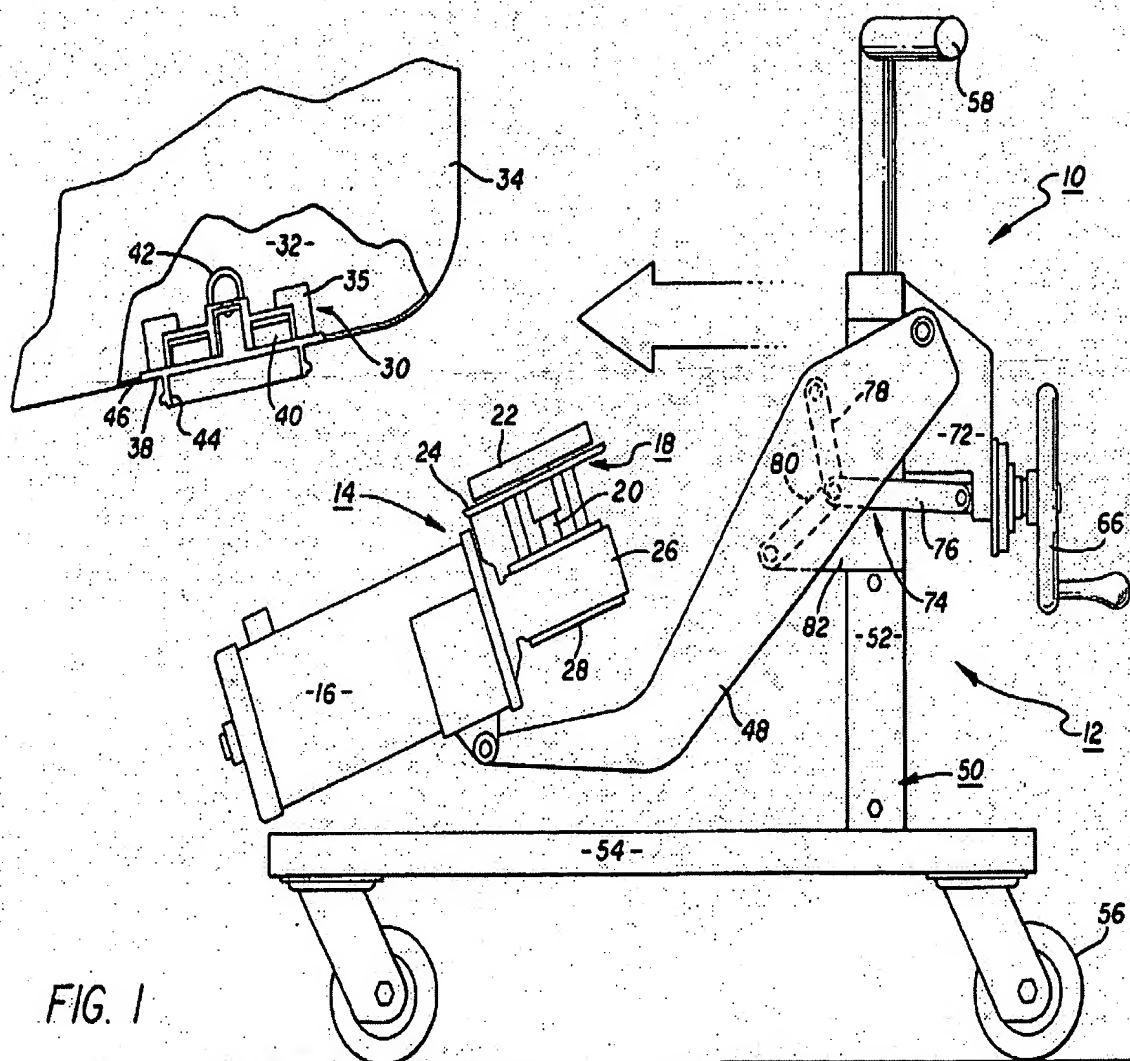
As shown in FIG. 2, the arm 48 is adapted to be rotated and to move the motor/magnetic mixer assembly 14 between a first position and a second position shown in FIG. 2. When the assembly 14 is in the second position, the drive magnet 22 is magnetically coupled to the driven magnet 40. When the assembly is in the second position, rotation of drive magnet 22 will induce rotation of the driven magnet 40 and the accompanying impeller 36. The arm 48 may pivot about a first pin 60. The arm 48 may also have a second pin 62 which allows the motor/magnetic mixer assembly 14 to rotate relative to the arm 48. The motor/assembly 14 may be coupled to the second pin 62 by a housing 64 which supports the motor 16. The second pin 62 allows the outer mixer assembly 18 to pivot, so that the drive magnet 22 is coaxial with the driven magnet 40 when rotated into the second position.

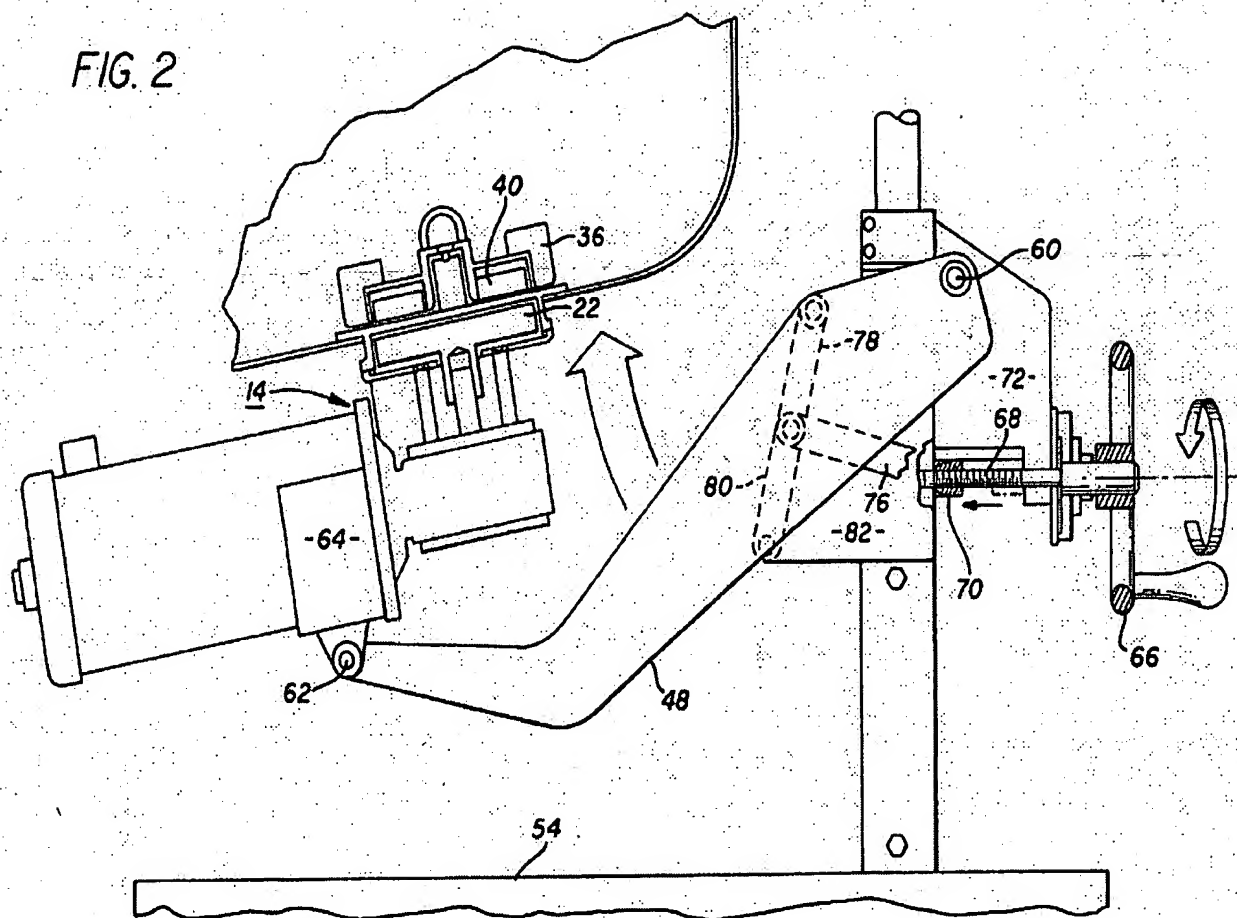
The transporter 12 preferably contains a device or mechanism which provides a mechanical advantage in rotating the arm 48, so that an operator can move the motor/magnetic mixer assembly 14 with relatively little effort. As shown in FIGS. 1 and 2, the transporter 12 may have a wheel 66 that can be rotated by the operator. The

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wheel 66 has a shaft 68 that extends through a threaded aperture 70 in a frame bracket 72. The wheel shaft 68 is coupled to a linkage mechanism 74 which includes a push rod 76 pivotally connected to the shaft 68, the arm 48 and a pair of secondary rods 78 and 80. The first secondary rod 78 is pivotally connected to the arm 48. The second secondary arm 80 is pivotally connected to bracket 82. Rotation of the wheel 66 moves the push rod 76, which rotates the arm 48 and mixer assembly 14. As shown in FIG. 2, the secondary arms 78 and 80 are moved into an over-center position to lock the arm 48 and mixer assembly 14 into the second position. Although a threaded shaft/wheel arrangement is shown and described, it is to be understood that the present invention may employ other arm rotation means such as an electric, or hydraulic motor.

In operation, the transporter 12 is moved so that the motor/magnetic mixer assembly 14 is in the first position shown in FIG. 1. As shown in FIG. 2, the arm 48 is then rotated so that the drive magnet 22 is coupled to the driven magnet 40. The motor 16 is then activated so that the impeller 36 is rotated within the tank 34. After a predetermined time interval, the motor 16 can be stopped and the arm 48 rotated to move the outer magnetic mixer assembly 18 back into the first position. The transporter 12 can then be moved to another tank, where the process is repeated. The present invention thus allows a single motor/magnetic mixer assembly to operate a plurality of agitator tanks. The transporter system is particularly useful in mixing pharmaceuticals which require periodic mixing. Each tank can be synchronized so that one motor/mixer assembly can sequentially mix a plurality of agitator tanks.





Allowable Subject Matter

11. Claims 5-8, 11-14, 16-18, 22-25, 30-335, 37, 39, and 42-48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Claim 49 is allowable over the prior art of record.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited prior art discloses magnetic stirrers and coupling arrangements.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri. All official facsimiles should be transmitted to the centralized fax receiving number 571-273-8300.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in cursive script, reading "Charles" followed by a stylized flourish.

Charles E. Cooley
Primary Examiner
Art Unit 1723

23 November 2005